Filed Date: 01/31/2022



January 28, 2022

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

RE: Flambeau Upper FERC Project Number 2640 Flambeau Hydro LLC Final Report 2021 Purple Loosestrife Inventory Report

Dear Ms. Bose:

On behalf of Flambeau Hydro LLC, "Flambeau" (Licensee), Renewable World Energies, LLC (RWE) is submitting a copy of the *Final Report 2021 Purple Loosestrife Inventory Report* for the Flambeau Upper Hydroelectric Project. The report is a requirement of Flambeau's Federal license pursuant to article 412. Monitoring was conducted on July 14, 2021. No out of the ordinary issues were encountered and no Purple Loosestrife was observed. The draft report was sent to the agencies by an attachment to an e-mail on November 24, 2021 for review and comment. No comments have been received. The next scheduled monitoring event will be conducted in 2022.

If you have any questions concerning this submittal, please contact Brian Kreuscher at the Renewable World Energies, LLC offices @ 855-994-9376 Ext 230. He can also be reached by e-mail at <u>bkreuscher@rwehydro.com</u>.

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Sincerely, Renewable World Energies, LLC Agent for Licensee

Mr. Jason Kreuscher Vice President

Attachment: Flambeau Upper Final Purple Loosestrife Inventory Report Correspondence

Cheryl Laatsch, WDNR Cc: Darin Simpkins, USFWS

2021 Purple Loosestrife Inventory for Flambeau Upper Hydroelectric Project FERC Project #2640 Flambeau Hydro, LLC Price County, Wisconsin



429 River Lane, P.O. Box 27 Amasa, Michigan 49903 Phone: 906-822-7889

Summary of Purple Loosestrife Inventory for Flambeau Upper Hydroelectric Project, FERC #2640

On July 14, 2021, White Water Associates, Inc. performed an inventory of purple loosestrife at the Flambeau Upper Project. The method of inventory approved and modified by a Federal Energy Regulatory Commission (FERC) Order (June 18, 2003) was defined as follows:

While purple loosestrife is blooming in mid-July to early August, the inventory should be conducted using a boat to survey the impoundment above the dam within the Project Boundary and on foot or by boat below the dam within the Project Boundary. County wetland maps may be used to determine other areas where Purple Loosestrife could be found on lands owned by Flambeau Hydro, LLC (FHLLC) within the Project Boundary. Lands owned by FHLLC within the Project Boundary will be surveyed on foot. A pair of binoculars should be used to search for the purple flowered spikes of the plant. When plants are located, the person(s) inventorying should get close enough to make a positive identification without disturbing the plants or the immediate area around the plants as this could cause them to spread. A GPS will be used to establish a GPS coordinate for the location of the plants. If it is not possible to get close enough to establish an accurate location, an approximate location will be established with reference to an established GPS coordinate. The plants should be inventoried by marking and numbering the location on a project map along with notes approximating size of plants, stand area, percent cover, stem density, plant density, and location with reference to established GPS coordinates. Photos and/or videotape will be taken of the largest occurrences.

2021 Observations

The Flambeau Upper Project boundary was divided into three different areas; the impoundment (from just downstream to the last rapids before the impoundment to the dam), the power canal/bypassed reach (the power canal from the dam to the powerhouse, and the bypassed reach area from the dam to the single lane service bridge just upstream of the HWY 182 bridge), and the tailrace (from the single lane service bridge just upstream of the HYW 182 bridge to the HWY 182 bridge).

The impoundment was surveyed by boat and no purple loosestrife plants were found.

The power canal/bypassed reach was surveyed on foot no purple loosestrife plant was found.

The tailrace was surveyed by boat and no purple loosestrife plants were observed.

Appendix A provides tables of historical purple loosestrife data. Appendix B provides scans of field data sheets.

Appendix A Tables

| Table 1. GPS points for purple loosestrife inventory at Flambeau Upper, FERC#2640. | | | | | | | | |
|--|----------|-----------|------------------------------------|-------|--|--|--|--|
| GPS Point | Latitude | Longitude | Plant | Stand | Comments | | | |
| | | | Height | Area | Comments | | | |
| | | | 2002-first observed. 15-25 plants. | | | | | |
| FLUPPL001 | 45.94678 | -90.43405 | N/A | N/A | 2003-discovered plants were not purple loosestrife but | | | |
| | | | | | winged loosestrife. | | | |
| | | | | | 2004-plants removed. | | | |
| | | | | | 2007-reoccurance of plants. | | | |
| | | | | | 2008-2021- no plants observed. | | | |
| | | | | N/A | 2006-first observed. | | | |
| FLUPPL002 | 45.93593 | -90.44344 | N/A | | 2007-plants observed. | | | |
| | | | | | 2008-2021-no plants observed. | | | |
| FLUPPL003 (FLUP PLA) | 45.93397 | -90.44525 | 3' | 1'x1' | 2016-first observed. 1 plant was observed and pulled | | | |
| | | | | | 2017-1 plant observed and removed. | | | |
| | | | | | 2018-2021- no plant observed. | | | |

Appendix B Data Sheets

| Upper Flam | Weathydroelec | e Loosestri tric Project - | - FERC # 2(| .40 | Page / of-Z |
|---|---------------------------------------|-------------------------------|---------------------------------------|--|---------------------------------------|
| Data 14,14,11 Con | ductod By | - Sh. (| | ~ ~ ~ | |
| Date 7-14-2) Cond HWL 401, 9-TWL 446 | la and lar | e Jim, | A. La | | D. e De |
| HWL MAN TWL MA | CFS YIN E | quipment Used | : pinocal | ras, 141. | +Doct 6D |
| Air Temp: <u>Col</u> °§F Wi | nd Speed: <u>(51,40</u> I | 3arometer: <u>30</u> | .03 Sky Cond | itions: | 5% clads |
| Time Survey Started | 7.4 () Time Su | rvey Ended | (1.30) BO | at (14ft or Can | oe) and/or Foot |
| Latitude StartB | L | | | A DESCRIPTION OF THE OWNER OWNER | |
| | | | N ^o | | , · · · · |
| Location of Survey Are | | pass ReachI | Impoundment | K FHLLC Pr | operty |
| Description of Location | n | ····· | · | | · · · · · · · · · · · · · · · · · · · |
| Historic Info: | | | | * ه | |
| Purple Loosestrife Fou | und: Yes of No | | | | 4 |
| | A REAL OWNERS AT A POST | | <u>'</u> . | | ; <i>r</i> |
| | | | | | |
| Information | | ···· | ······ | 1 | · · · · · · · · · · · · · · · · · · · |
| Site | | | | | |
| Time Photo ID | | | | <u> </u> | |
| Photo ID Location | | | | | |
| Single or Multi-stem | | | | | |
| # of Plants | | | | | |
| Acreage est. | | | | | |
| Stand Area Density | | | | | |
| Size Colony | · · · · · · · · · · · · · · · · · · · | | | | |
| S=0-5, M=6-50, L=>50~ | | | | | - |
| Plant Height ~ Ft | | | | | |
| Flowering % | | | ······ | | |
| Beetle Feeding? | | | <u>ئ</u> ہ | | |
| Plant Vigor (Very poor to | | | | | |
| good) * | | | | | a |
| Plant Removed (explain) | | | | | |
| | | | | | |
| | | | | | |
| Information | | | | | |
| Site | | | | | |
| Time | | | | | |
| Photo ID | | | | | |
| Location | | | | <u></u> | |
| Single or Multi-stem # of Plants | | | | 1 | |
| | | | | · · · · · · · · · · · · · · · · · · · | |
| Acreage est. Stand Area Density | | | ····· | | |
| Size Colony | | | | | |
| S=0-5, M=6-50, L=>50~ | | | | | |
| Plant Height ~ Ft | | | | | · · · · · · · · · · · · · · · · · · · |
| Flowering % | | | ······ | * | |
| Beetle Feeding? | | | | · · · · | |
| Plant Vigor (Very poor to | | | · · · · · · · · · · · · · · · · · · · | | |
| good) | | | | | |
| Plant Removed (explain) | | | · · · · · · · · · · · · · · · · · · · | ** | |
| Other Species Observ | /ed: | I | | | |
| | | | | ð | A - |
| Canadian gee Painted that | ne 2 down i. | a Water il | our stan. | a lin a | M. Shan |

| | Purple Loosestrife Survey | | | | | | | | |
|-----|---|--|--|--|--|--|--|--|--|
| • • | | | | | | | | | |
| | Wher Flambean Hydroelectric Project - FERC #2(.41) Page Z of Z | | | | | | | | |
| | Date <u>7-14-21</u> Conducted By Ang. Shine Sean Coron HWLMS A TWLM613 CFSWY Equipment Used: | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | Air Temp: (1/ °C Wind Speed 5FO Barometer: 3003 Sky Conditions: 58 (ands | | | | | | | | |
| | Time Survey Started 7.55 Time Survey Ended 8:15 | Boat (14ft or Canoe) and/or Foot | | | | | | | |
| | Latitude Start <u>Dam</u> Longitude End <u>Mam</u> | · · · · · · · · · · · · · · · · · · · | | | | | | | |
| | Location of Survey Area: Tailrace χ Bypass Reach χ Impoundment FHLLC Property χ | | | | | | | | |
| | | | | | | | | | |
| | Description of Location | | | | | | | | |
| | Historic Info: | ^ * | | | | | | | |
| | Purple Loosestrife Found: Yes of No) | | | | | | | | |
| | | | | | | | | | |
| | Information | , | | | | | | | |
| | Site | | | | | | | | |
| | Time | | | | | | | | |
| | Photo ID | | | | | | | | |
| | Location | · · · · · · · · · · · · · · · · · · · | | | | | | | |
| | Single or Multi-stem | | | | | | | | |
| | # of Plants | | | | | | | | |
| | Acreage est. | | | | | | | | |
| | Stand Area Density | · · | | | | | | | |
| | Size Colony | | | | | | | | |
| () | S=0-5, M=6-50, L=>50~ | | | | | | | | |
| | Plant Height ~ Ft | | | | | | | | |
| | Flowering % | | | | | | | | |
| | Beetle Feeding? | | | | | | | | |
| | Plant Vigor (Very poor to good) | | | | | | | | |
| | Plant Removed (explain) | | | | | | | | |
| | | | | | | | | | |
| - | | · · · · · · · · · · · · · · · · · · · | | | | | | | |
| | Information | | | | | | | | |
| | Site | | | | | | | | |
| | Time | | | | | | | | |
| | Photo ID | | | | | | | | |
| * | Location | ····· | | | | | | | |
| | Single or Multi-stem | ······································ | | | | | | | |
| | # of Plants | | | | | | | | |
| | Acreage est. | | | | | | | | |
| | Stand Area Density | | | | | | | | |
| | Size Colony | | | | | | | | |
| | S=0-5, M=6-50, L=>50~ | · · · · · · · · · · · · · · · · · · · | | | | | | | |
| | Plant Height ~ Ft | | | | | | | | |
| | Flowering % | ····· | | | | | | | |
| | Beetle Feeding? Plant Vigor (Very poor to | | | | | | | | |
| | good) | | | | | | | | |
| | Plant Removed (explain) | | | | | | | | |
| | Other Species Observed: | | | | | | | | |

Other Species Observed:

Crowley (P-2473) Pixley (P-2395) Upper (P-2640) Lower (P-2421) Draft Purple Loosestrife Reports

Brian Kreuscher < bkreuscher@rwehydro.com>

Wed 11/24/2021 12:10 PM

To: Cheryl Laatsch <cheryl.laatsch@wisconsin.gov>; Darin_Simpkins@fws.gov <Darin_Simpkins@fws.gov>

4 attachments (3 MB)

1. FLLWPLReport2021-complete.pdf; 1. Pixley PL Report 2021-complete.pdf; 1.Upper Flambeau PL Report 2021complete.pdf; 1. Crowley PL Report 2021-complete.pdf;

Cheryl and Darin,

Attached are copies of the Purple Loosestrife Draft Reports for the surveys conducted at Flambeau Upper (P-2640), Flambeau Lower (P-2421), Flambeau Pixley (P-2395) and Flambeau Crowley (P-2473).

There were several observances in the Crowley impoundment that were not removed due to plant size or being on private property.

Please return any comments on the draft reports to me within 30 days.

Thanks **Brian Kreuscher Renewable World Energies Regulatory & Compliance** 855-994-9376 x230

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